April 2007 1

# GDP and the Economy

## Final Estimates for the Fourth Quarter of 2006

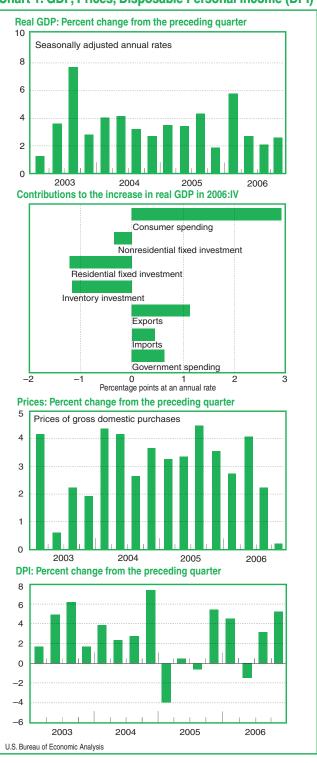
EQNOMIC growth accelerated in the fourth quarter of 2006, according to the "final" estimates of the national income and product accounts (NIPAs).¹ Real gross domestic product (GDP) increased 2.5 percent, revised up 0.3 percentage point from the "preliminary" estimate (chart 1 and table 1).² In the third quarter, it increased 2.0 percent. For 2006, real GDP grew 3.3 percent, compared with a 3.2-percent increase for 2005.

In the fourth quarter, the acceleration in real GDP growth primarily reflected a downturn in imports (subtracted in the derivation of GDP) and accelerations in consumer spending, exports, and Federal Government spending, which were moderated by downturns in investment in inventories and equipment and software investment and by a deceleration in nonresidential structures investment.<sup>3</sup>

- Prices of goods and services purchased by U.S. residents increased 0.2 percent, following a 2.2-percent increase. Energy prices turned down sharply.
- •Real disposable personal income (DPI) increased 5.3 percent after increasing 3.2 percent. The acceleration reflected a downturn in the implicit price deflator used to adjust current-dollar DPI, which decelerated.
- Corporate profits decreased 0.3 percent at a quarterly rate after increasing 3.9 percent (page 4).
- Defense spending turned up. See the related box article on defense spending on page 6.
- •Real gross national product increased 3.5 percent after increasing 1.8 percent. The fourth-quarter increase was 1.0 percentage point more than the increase in real GDP, reflecting an increase in net receipts of income from the rest of the world.

*Christopher Swann prepared this article.* 

**Chart 1. GDP, Prices, Disposable Personal Income (DPI)** 



 $<sup>1.\</sup> Real$  estimates are in chained (2000) dollars, and price indexes are chain-type measures.

<sup>2.</sup> Each GDP estimate for a quarter (advance, preliminary, and final) incorporates increasingly comprehensive and improved source data. More information can be found at <www.bea.gov/bea/about/infoqual.htm> and <www.bea.gov/bea/faq/national/gdp\_accuracy.htm>. Quarterly estimates are expressed at seasonally adjusted annual rates, which show the value of an activity if the quarterly rate were maintained for a year.

<sup>3.</sup> In this article, "consumer spending" refers to the NIPA series "personal consumption expenditures," "inventory investment" refers to "change in private inventories," "Federal Government spending" refers to "Federal Government consumption expenditures and gross investment," and "state and local government spending" refers to "state and local government consumption expenditures and gross investment."

## **Real GDP Overview**

Table 1. Real Gross Domestic Product and Components

[Seasonally adjusted at annual rates]

[5	easonally a	aujuste	u at ani	nuai rai	esj					
	Share of current- dollar GDP (percent)	p	recedir	ge from ng perio cent)	od	ch	cent DP ts)			
	2006		20	06		2006				•
	IV	1	II	III	IV	I	II	III	IV	
Gross domestic product 1	100.0	5.6	2.6	2.0	2.5	5.6	2.6	2.0	2.5	
Personal consumption expenditures	70.0	4.8	2.6	2.8	4.2	3.38	1.81	1.96	2.93	/
Durable goods	8.0	19.8	-0.1	6.4	4.4	1.50	-0.01	0.50	0.35	
Nondurable goods	20.3	5.9	1.4	1.5	5.9	1.20	0.30	0.32	1.18	
Services	41.7	1.6	3.7	2.8	3.4	0.67	1.52	1.14	1.41	
Gross private domestic	10.4	7.0	4.0	0.0	15.0	4 04	0.17	0.10	0.74	
investment	<b>16.1</b> 15.9	<b>7.8</b> 8.2	1.0 -1.6	<b>-0.8</b> -1.2	<b>-15.2</b> -9.1	1.31 1.34	<b>0.17</b> -0.27	<b>-0.13</b> -0.19	<b>-2.71</b> -1.54	
						-	-		-0.34	/
Nonresidential Structures	10.6 3.2	13.7 8.7	4.4 20.3	10.0 15.7	-3.1 0.8	1.36 0.25	0.45 0.56	1.01 0.46	0.03	1
Equipment and software	7.3	15.6	-1.4	7.7	-4.8	1.11	-0.10	0.40	-0.36	
Residential	5.3	-0.3	-11.1	-18.7	-19.8	-0.02	-0.72	-1.20	-1.21	/
Change in private inventories	0.2					-0.03	0.44	0.06	-1.16	
Net exports of goods and services	-5.2					-0.04	0.42	-0.19	1.59	
Exports	11.3	14.0	6.2	6.8	10.6	1.41	0.66	0.73	1.14	-
Goods	8.0	17.3	6.0	9.4	8.4	1.20	0.45	0.71	0.65	
Services	3.3	6.7	6.7	0.8	16.3	0.21	0.21	0.03	0.50	
Imports	16.5	9.1	1.4	5.6	-2.6	-1.46	-0.24	-0.93	0.45	
Goods	13.9	9.4	-0.1	7.1	-4.1	-1.27	0.01	-1.00	0.61	
Services	2.7	7.4	9.9	-2.6	6.2	-0.19	-0.25	0.07	-0.16	
Government consumption										
expenditures and gross investment	19.1	4.9	0.8	1.7	3.4	0.94	0.16	0.32	0.64	
Federal	7.0	8.8	-4.5	1.3	4.6	0.61	-0.32	0.09	0.31	\
National defense	4.7	8.9	-2.0	-1.2	12.3	0.41	-0.09	-0.06	0.55	
Nondefense State and local	2.2 12.2	8.5 2.7	-9.3 4.0	6.5 1.9	-9.6 2.7	0.20	-0.23 0.48	0.15 0.23	-0.23 0.33	
Addenda:	12.2	,	0	1		0.00	0.10	0.20	0.50	
Final sales of domestic product .		5.6	2.1	1.9	3.7	5.61	2.11	1.90	3.62	ı
Gross domestic purchases price		5.0	2.1	1.9	0.7	3.01	2.11	1.30	0.02	\
index		2.7	4.0	2.2	0.2					
GDP price index		3.3	3.3	1.9	1.7					

<sup>1.</sup> The estimates of GDP under the contribution columns are also percent changes.

Note. Percent changes are from NIPA table 1.1.1, contributions are from NIPA table 1.1.2, and shares are from NIPA table 1.1.10.

Consumer spending accelerated, contributing 2.93 percentage points to real GDP growth after adding 1.96 percentage points. Durable goods turned down, reflecting a downturn in motor vehicles and parts. Nondurable goods accelerated; spending for food turned up. An acceleration in services reflected accelerations in spending for medical services and "other" services.

Nonresidential fixed investment turned down; investment in equipment and software turned down.

Residential fixed investment decreased for the fifth consecutive quarter and subtracted 1.21 percentage points from GDP growth.

Inventory investment turned down and subtracted 1.16 percentage points from GDP growth, reflecting a downturn in wholesale trade.

Exports accelerated, adding 1.14 percentage points to GDP growth after adding 0.73 percentage point.

Imports turned down, adding 0.45 percentage point to GDP growth after subtracting 0.93 percentage point. The downturn in goods imports reflected downturns in nonpetroleum industrial supplies and materials, in petroleum and products, and in nonautomotive capital goods. Services imports turned up.

Federal spending picked up; an upturn in defense spending added 0.55 percentage point to GDP growth.

Real final sales of domestic product (real GDP less inventory investment) increased 3.7 percent after increasing 1.9 percent.

#### **GDP and Gross Domestic Purchases**

In addition to gross domestic product (GDP), another related measure of economic growth—gross domestic purchases—is included in the national income and product accounts (NIPAs).

GDP measures the market value of final goods and services produced by labor and property in the United States, including the goods that are added to, or subtracted from, inventories. GDP is defined as the sum of consumer spending, business and residential investment, inventory investment, government spending, and exports less imports.

Gross domestic purchases is defined as GDP less exports plus imports. It measures domestic demand for goods and services regardless of their origin. Exports represent foreign demand for U.S. goods and services. Subtracting exports from GDP yields a measure of expenditures that focuses on domestic buyers. Imports can be viewed as the value of goods and services that exceed the domestic supply and that expand the consumption and investment alternatives for domestic purchasers.

Differences between GDP and gross domestic purchases reflect patterns in imports less exports: As imports exceed exports, gross domestic purchases exceeds GDP.

For annual and quarterly estimates of these measures, see NIPA tables 1.4.1 and 1.4.3–1.4.6.

For more information on GDP and gross domestic purchases, see also "A Guide to the National Income and Product Accounts of the United States" on BEA's Web site at <a href="https://www.bea.gov/bea/an/nipaguid.pdf">www.bea.gov/bea/an/nipaguid.pdf</a>>.

## **Revisions to GDP**

Table 2. Preliminary and Final Estimates for the Fourth Quarter of 2006

[Seasonally adjusted at annual rates]

(Seasonally adju-	sicu ai ai	iiiuai iate	20]			
	Change from preceding quarter (percent) Contribution change in (percentage			e in rea	eal GDP	
	Prelim- inary	Final	Final minus prelim- inary	Prelim- inary	Final	Final minus prelim- inary
Gross domestic product (GDP) 1	2.2	2.5	0.3	2.2	2.5	0.3
Personal consumption expenditures	4.2	4.2	0.0	2.88	2.93	0.05
Durable goods	4.4	4.4	0.0	0.35	0.35	0.00
Nondurable goods	6.0	5.9	-0.1	1.19	1.18	-0.01
Services	3.2	3.4	0.2	1.34	1.41	0.07
Gross private domestic investment	-15.6	-15.2	0.4	-2.78	-2.71	0.07
Fixed investment	-8.5	-9.1	-0.6	-1.43	-1.54	-0.11
Nonresidential	-2.4	-3.1	-0.7	-0.26	-0.34	-0.08
Structures	-0.8	0.8	1.6	-0.03	0.03	0.06
Equipment and software	-3.2	-4.8	-1.6	-0.24	-0.36	-0.12 -
Residential	-19.1	-19.8	-0.7	-1.16	-1.21	-0.05
Change in private inventories				-1.35	-1.16	0.19
Net exports of goods and services				1.50	1.59	0.09
Exports	10.5	10.6	0.1	1.13	1.14	0.01
Goods	8.5	8.4	-0.1	0.65	0.65	0.00
Services	15.5	16.3	0.8	0.48	0.50	0.02
Imports	-2.2	-2.6	-0.4	0.38	0.45	0.07
Goods	-3.8	-4.1	-0.3	0.56	0.61	0.05
Services	7.1	6.2	-0.9	-0.18	-0.16	0.02
Government consumption expenditures and						
gross investment	3.3	3.4	0.1	0.62	0.64	0.02
Federal	4.4	4.6	0.2	0.30	0.31	0.01
National defense	12.3	12.3	0.0	0.54	0.55	0.01
Nondefense	-10.2	-9.6	0.6	-0.24	-0.23	0.01
State and local	2.6	2.7	0.1	0.32	0.33	0.01
Addenda:						
Final sales of domestic product	3.6	3.7	0.1	3.57	3.62	0.05
Gross domestic purchases price index	0.2	0.2	0.0			
GDP price index	1.7	1.7	0.0			

<sup>1.</sup> The estimates for GDP under the contribution columns are also percent changes.

The final estimate of real GDP growth in the fourth quarter was 2.5 percent, 0.3 percentage point more than the preliminary estimate. The upward revision to the percent change in real GDP primarily reflected an upward revision to inventory investment that was partly offset by a downward revision to equipment and software investment. For 1978–2005, the revisions, without regard to sign, averaged 0.3 percentage point from the preliminary to the final estimates.

The largest contributor to the downward revision to equipment and software investment was a downward revision to software, which reflected newly available data from the Census Bureau quarterly services survey.

The upward revision to inventory investment was mostly accounted for by a revision to retail motor vehicle inventories, reflecting a revised Bureau of Labor Statistics producer price index for light trucks for October.

#### Source Data for the Final Estimates

The final estimates of gross domestic product for the fourth quarter of 2006 incorporated the following source data.

Personal consumption expenditures: Retail sales for November and December (revised) and quarterly services survey for the fourth quarter (new).

Nonresidential fixed investment: Construction put in place for November and December (revised) and quarterly services survey for the fourth quarter (new).

Residential fixed investment: Construction put in place for November and December (revised) and Producer Price Index for October.

Change in private inventories: Manufacturers' and trade

inventories for December (revised) and Producer Price Index for October (revised).

Exports and imports of goods and services: International transactions accounts data for the third and fourth quarters (revised) and goods data for December (revised).

Government consumption expenditures and gross investment: State and local government construction put in place for November and December (revised).

*GDP prices:* Export and import prices for October, November, and December (revised), unit value index for petroleum imports for October, November, and December (revised), and prices of single-family houses under construction for the fourth quarter (revised).

## **Corporate Profits**

**Table 3. Corporate Profits** 

[Seasonally adjusted]

	Billio	ns of d	ollars (a	nnual ra	ate)	Percent change from				
	Level	р	Chang recedin		er	preceding quarter (quarterly rate)				
	2006		20	06		2006				
	IV	I	II	III	IV	1	II	Ш	IV /	
Current production measures:									/	
Corporate profits	1,648.4	175.6	22.7	61.5	-4.9	12.6	1.4	3.9	-0.3	
Domestic industries	1,376.6	145.8	8.9	66.8	-42.1	12.2	0.7	4.9	-3.0	
Financial	495.3	51.4	41.7	-9.1	20.5	13.1	9.4	-1.9	4.3	
Nonfinancial	881.3	94.5	-32.8	75.8	-62.6	11.7	-3.6	8.7	-6.6	
Rest of the world	271.9	29.8	13.8	-5.3	37.3	15.2	6.1	-2.2	15.9	
Receipts from the rest of the world	428.1	15.7	25.7	6.9	19.2	4.4	6.8	1.7	4.7	
Less: Payments to the rest of the world	156.2	-14.0	11.9	12.1	-18.0	-8.5	7.9	7.5	-10.3	
Less: Taxes on corporate income	476.2	32.3	19.2	14.5	-14.4	7.6	4.2	3.0	-2.9	
Equals: Profits after tax	1,172.3	143.2	3.6	47.0	9.6	14.8	0.3	4.2	0.8	
Net dividends	671.4	14.7	15.4	19.3	21.0	2.5	2.5	3.1	3.2	
Undistributed profits from current production	500.9	128.5	-11.8	27.8	-11.5	34.9	-2.4	5.7	-2.2	
Net cash flow	1,379.4	125.3	1.1	30.2	-1.1	10.2	0.1	2.2	-0.1	

Corporate profits from current production decreased \$4.9 billion, or 0.3 percent, in the fourth quarter after increasing \$61.5 billion in the third quarter.

Profits of domestic financial corporations increased \$20.5 billion, or 4.3 percent, following a decrease of \$9.1 billion.

Profits of domestic nonfinancial corporations decreased \$62.6 billion, or 6.6 percent, after increasing \$75.8 billion.

Taxes on corporate income decreased \$14.4 billion, or 2.9 percent.

After-tax profits increased \$9.6 billion, or 0.8 percent.

Undistributed corporate profits (a measure of net saving that equals after-tax profits less dividends) decreased \$11.5 billion, or 2.2 percent.

Net cash flow with inventory valuation and capital consumption adjustments (a profits-related measure of internally generated funds available for investment) decreased \$1.1 billion, or 0.1 percent.

## **Measuring Corporate Profits**

Corporate profits is a widely followed economic indicator used to gauge corporate health, assess investment conditions, and analyze the effect on corporations of economic policies and conditions. In addition, corporate profits is an important component in key measures of income.

BEA's measure of corporate profits aims to capture the income earned by corporations from current production in a manner that is fully consistent with the national income and product accounts (NIPAs). The measure is defined as receipts arising from current production less associated expenses. Receipts exclude income in the form of dividends and capital gains, and expenses exclude bad debts, natural resource depletion, and capital losses.

Because direct estimates of NIPA-consistent corporate profits are unavailable, BEA derives these estimates in three steps.

First, BEA measures profits before taxes to reflect corporate income regardless of any redistributions of income through taxes. This measure is partly based on tax return

information from the Internal Revenue Service; BEA uses tax accounting measures as a source of information on profits for two reasons: They are based on well-specified accounting definitions, and they are comprehensive, covering all incorporated businesses—publicly traded and privately held—in all industries. BEA also uses other sources of information to estimate pretax profits, including information from the Census Bureau.

Second, to remove the effects of price changes on inventories valued at historical cost and of tax accounting for inventory withdrawals, BEA adds an inventory valuation adjustment that values inventories at current cost.

Third, to remove the effects of tax accounting on depreciation, BEA adds a capital consumption adjustment (CCAdj). CCAdj is defined as the difference between consumption of fixed capital (the decline in the value of the stock of assets due to wear and tear, obsolescence, accidental damage, and aging) and capital consumption allowances (tax return depreciation).

## **Corporate Profits by Industry**

Table 4. Corporate Profits by Industry

[Seasonally adjusted]

	Billi	Percent change from									
	Level		Chang precedin		er	1	preceding quarter (quarterly rate)				
	2006	2006				2006					
	IV	I	II	III	IV	I	II	Ш	IV		
Industry profits:											
Profits with IVA	1,820.2	158.6	34.9	63.2	4.4	10.2	2.0	3.6	0.2	١,	
Domestic industries	1,548.3	128.8	21.1	68.4	-32.8	9.5	1.4	4.5	-2.1		
Financial	522.7	50.6	44.3	-8.1	22.6	12.2	9.5	-1.6	4.5		
Nonfinancial	1,025.6	78.3	-23.2	76.5	-55.4	8.2	-2.3	7.6	-5.1		
Utilities	54.9	1.4	7.1	6.0	2.1	3.7	17.7	12.8	4.1	\	
Manufacturing	324.5	41.8	-10.8	42.0	-7.4	16.1	-3.6	14.5	-2.2	\	
Wholesale trade	93.7	1.3	-8.9	26.8	-31.4	1.1	-8.3	27.2	-25.1	\	
Retail trade	145.0	-6.1	-1.8	10.1	13.7	-4.7	-1.4	8.3	10.4	1	
Transportation and warehousing	33.3	8.3	11.3	1.0	-6.3	43.4	41.4	2.7	-16.0		
Information	91.9	6.2	-3.9	-2.6	8.6	7.4	-4.4	-3.0	10.3		
Other nonfinancial	282.2	25.5	-16.2	-6.8	-34.9	8.1	-4.7	-2.1	-11.0		
Rest of the world	271.9	29.8	13.8	-5.3	37.3	15.2	6.1	-2.2	15.9		
Addenda:											
Profits before tax (without IVA and CCAdj)	1,837.6	142.3	70.9	42.5	-16.4	8.9	4.1	2.3	-0.9	/	
Profits after tax (without IVA and CCAdj)	1,361.5	110.0	51.7	28.0	-1.9	9.4	4.0	2.1	-0.1		
IVA	-17.5 -171.7	16.3 17.0	-36.0 -12.2	20.7 -1.6	20.7 -9.3						

Note. Levels of these and other profits series are shown in NIPA tables 1.12, 1.14, 1.15, and 6.16D. IVA Inventory valuation adjustment CCAdj Capital consumption adjustment

Profits with inventory valuation adjustment increased \$4.4 billion, or 0.2 percent. This increase, in contrast to a \$4.9 billion decrease in profits from current production, reflects the capital consumption adjustment, which decreased \$9.3 billion.

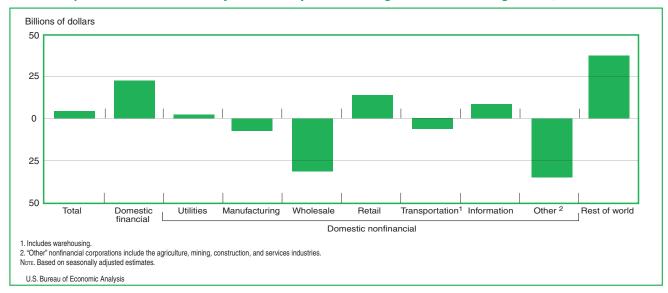
Profits of domestic industries turned down, decreasing \$32.8 billion, or 2.1 percent, although fourth-quarter profit levels were higher than those reported in the first two quarters of 2006.

Profits of domestic financial industries turned up, increasing \$22.6 billion, or 4.5 percent, after decreasing of \$8.1 billion.

Profits of domestic nonfinancial industries turned down, decreasing \$55.4 billion, or 5.1 percent, after increasing \$76.5 billion. The downturn primarily reflected downturns in wholesale trade and in manufacturing, a larger decrease in "other" nonfinancial industries, and a downturn in transportation and warehousing.

Rest-of-the-world profits turned up. Receipts increased \$19.2 billion, and payments decreased \$18.0 billion.

Chart 2. Corporate Profits With Inventory Valuation Adjustment: Change From the Preceding Quarter, 2006:IV



#### **Corporate Profits by Industry**

Industry profits are corporate profits by industry with inventory valuation adjustment (IVA). The IVA removes the effect of prices on inventories. The IVA is the difference between the cost of inventory withdrawals at acquisition cost and replacement cost. Ideally, BEA would also add the capital consumption adjustment (CCAdj) for each indus-

try. However, estimates of the CCAdj are only available for two broad categories: Total financial industries and total nonfinancial industries. For more information about BEA's methodology, see "Corporate Profits: Profits Before Tax, Profits Tax Liability, and Dividends" at <www.bea.gov/bea/mp\_national.htm>.

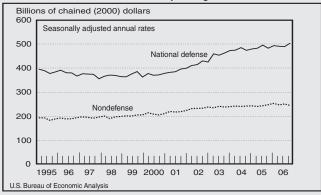
## **Defense Spending for Goods and Services Shipped Abroad**

Defense spending has trended upward since 2001 (chart 1), though annual growth has moderated from a peak of 8.7 percent in 2003 to 1.9 percent in 2006. This article provides a quick overview of how defense expenditures are treated in the national income and product accounts.

In general, defense spending for goods and services purchased by the U.S. Government is considered government consumption or investment. Whether that spending affects gross domestic product (GDP) depends on where the goods and services are produced.

- Government spending for goods and services that are produced domestically and used by the U.S. military no matter where—are considered government consumption or investment, and GDP is directly affected. When the government purchases domestically produced goods or services—for example, a high-mobility multi-purpose wheeled vehicle (HMMWV or Hummer) built in Indiana for use by U.S. troops in Iraq—government investment and GDP increase by the amount of the purchase. In the case of investment goods that have long production times, the national accounts initially record the construction of the good as an increase in private work-inprogress inventories, which boosts GDP. When the final good is delivered to the government, the accounts record the full value of the good as government investment, and the change in private inventories is reduced by the cumulative value of work-in-progress up until delivery.
- Government spending for goods and services that are produced abroad but used by the U.S. military is considered government consumption or investment; however, the value of that spending is offset by an increase in imports of goods or services. Thus, there would be no effect on GDP. For example, the purchase of a howitzer produced by BAE Systems in the United Kingdom and shipped to Iraq for use by the U.S. military results in an increase in government investment and an offsetting increase in imports of capital goods. However, the howitzer becomes part of the Federal capital stock. And the consumption of fixed capital (depreciation) for this howitzer will be added to GDP over the life of the product. Similarly, the purchase of local goods and services by U.S.

Chart 1. Real Federal Government Spending



military or diplomatic installations abroad results in an increase in government consumption and an offsetting increase in imports.

- Financial transfers to foreign governments to finance their purchases of domestically manufactured defense goods or services are not considered government consumption or investment but rather current transfer payments to the rest of the world. The subsequent foreign purchase from a domestic U.S. contractor is included in GDP as an export of goods or services. However, if the purchase is from a foreign affiliate of a U.S. company of a good or service that is produced abroad, the transaction would not be included in GDP as an export, but the profits of the foreign affiliate would be included in gross national product (GNP) as an increase in income receipts from the rest of the world.
- Financial transfers to foreign governments to finance purchases of defense goods and services from foreign companies that are not affiliates of U.S. companies have no effect on GDP or GNP. However, they are recorded in the national accounts as government current expenditures, classified as "other current transfer payments to the rest of the world."
- Payments to military personnel are considered government consumption, boosting GDP, no matter where the personnel are located.

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